

CLAIMS

What is claimed is:

1. A door assembly for an interior component of a vehicle comprising:
a door body movably attached to an interior component of a vehicle;
a sensor adapted to generate a signal that is a function of a desired position of said door body; and
an actuator selectively coupled to said door body, said actuator operable to enable said door body to move in response to said signal.
2. The door assembly according to Claim 1, wherein said interior component includes an outer surface defining an opening therein and wherein said door body is movable between a closed position in which the door body is positioned generally flush with said outer surface of said interior component to cover the opening within the interior component and an open position in which the door body is positioned to allow access to the opening within the interior component from the passenger compartment of the vehicle.
3. The door assembly according to Claim 2, wherein said actuator is adapted to move said door body to said open position in response to signal.
4. The door assembly according to Claim 2, wherein said actuator is adapted to move said door body to said closed position in response to said signal.
5. The door assembly according to Claim 2, wherein said actuator is adapted to move said door body from said closed position to a position flush with said outer surface of said interior component in response to said signal.

6. The door assembly according to Claim 1, wherein said actuator is adapted to move said door body in response to said signal to achieve a desired position of said door body relative to said interior component.

7. The door assembly according to Claim 1, wherein said signal is a function of at least one of the distance between said door body and said interior component, the distance between said sensor and said door body, and said sensor and said interior component.

8. The door assembly according to Claim 1, wherein said signal representative of the presence of an object near or in contact with said door assembly.

9. The door assembly according to Claim 1, wherein said door assembly further comprises a plurality of sensors, each of said plurality of sensors is capable of detecting at least one of a plurality of conditions.

10. The door assembly according to Claim 1, wherein the sensor includes at least one of a field effect device, an optical sensor, a magnetic sensor, a Hall Effect device, a Piezo device, and a photoelectric device.

11. The door assembly according to Claim 1, wherein said door assembly further includes a latch mechanism to retain said door body to said interior component.

12. The door assembly according to Claim 11, wherein said latching mechanism is incorporated within said actuator.

13. The door assembly according to Claim 1, wherein said actuator is adapted to restrain said door body in a desired position relative to said interior component.

14. The door assembly according to Claim 1, wherein at least a portion of said sensor is positioned on said interior component.

15. The door assembly according to Claim 1, wherein said door body includes an inner surface and an outer surface, and wherein said sensor is positioned on at least one of said inner surface of said door body and said outer surface of said door body.

16. The door assembly according to Claim 1, wherein said sensor is positioned within said door body such that said sensor is not visible from within the passenger compartment of the vehicle and such that said sensor is adapted to detect a condition occurring near said door assembly within the passenger compartment of the vehicle.

17. The door assembly according to Claim 1, wherein said actuator comprises at least one of a motor assembly and a damper.

18. The door assembly according to Claim 1, further comprising a controller, wherein said controller is a microprocessor capable of receiving said signal from said sensor and generating a signal to said actuator.

19. The door assembly according to Claim 1, wherein said sensor is molded within said interior component.

20. The door assembly according to Claim 1, wherein said interior component is an instrument panel, and said instrument panel and said door body define a glove box.